

TEXAS DEPARTMENT OF INSURANCE

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PRODUCT EVALUATION WIN-1434

Effective July 1, 2011

*The following product has been evaluated for compliance with the wind loads specified in the **International Residential Code (IRC)** and the **International Building Code (IBC)**. This product shall be subject to reevaluation **October 2012**.*

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code and the Texas Engineering Practice Act.

Series 1510/1580/1680 Aluminum Single Hung Windows, Individual Windows, Non-impact Resistant, manufactured by:

Milgard Manufacturing Inc.
1010 54th avenue East
Tacoma, Washington 98424
Telephone: (253) 896-7631

will be acceptable in designated catastrophe areas along the Texas Gulf Coast when installed in accordance with the manufacturer's installation instructions and this product evaluation.

PRODUCT DESCRIPTION

The Series 1510/1580/1680 windows are aluminum single hung windows. The aluminum single hung windows evaluated in this report are individual, non-impact resistant windows. This product evaluation report is for aluminum single hung windows based on the following tested construction:

General Description:

System	Description	Label Rating
1	1510/1580/1680 Aluminum Single Hung Window; (O/X)	H-LC25 48 x 84

Product Dimensions:

System	Overall Size	Operable Sash Size	Fixed Daylight Opening
1	47 1/2" x 83 1/2"	46" x 41 5/8"	45 1/4" x 39 1/8"

Glazing Description:

System	Glass Construction ¹	Glazing Method ²
1	IG-1	GM-1

Note: ¹ See the "Glass Construction Key" for the glazing construction.

² See the "Glazing Method Key" for the glazing method description.

Glass Construction Key:

IG-1: The operable sashes contain sealed insulating glass units. The sealed insulating glass units are comprised of two double strength ($\frac{1}{8}$ ") annealed glass lites separated by a desiccant-filled steel U-channel spacer system. The glass thickness and type used in the tested assembly and in smaller assemblies shall comply with ASTM E 1300-04.

Glazing Method Key:

GM-1: The insulating glass units are set on blocks and bedded against a double-sided foam glazing tape on the interior side of the glazing pocket. A rigid vinyl snap-in glazing bead secures the insulating glass units from the exterior.

Frame Construction: The frame members are manufactured from extruded aluminum. The frame corners are mitered and secured together with screws. The fixed interlock is secured to the side jambs with screws.

Sash Construction: The sash members are manufactured from extruded aluminum. The sash corners are mitered and secured together with screws.

Reinforcement: None.

Hardware:

- Spring loaded latch; Located on the top face of the sash top rail and positioned at the mid-point.
- Pull handles; Located on the sash interlock and sash bottom rail.
- Guide buttons; Located on the active sash stile, two per stile.
- Block and tackle balance system; Located in each side jamb.
- Night latch; Located on the interior face of the sash interlock.

Product Identification: A certification program label (AAMA) will be affixed to the window. The certification program label includes the manufacturer's code name (MG-12); the product name: **1510/1580/1680**; performance characteristics; the approved inspection agency (AAMA); and the applicable standard: ANSI/AAMA/NWDA 101/I.S.2-97.

LIMITATIONS

Design pressures:

System	Maximum Width (in.)	Maximum Height (in.)	Design Pressures (psf)
1	47 $\frac{1}{2}$	83 $\frac{1}{2}$	± 25

Impact Resistance: These window assemblies do not satisfy the Texas Department of Insurance's criteria for protection from windborne debris. These window assemblies will need to be protected with an impact protective system when installed in areas where windborne debris is required.

Acceptance of Smaller Assemblies: Window assemblies with dimensions equal to or smaller than those specified above are acceptable within the limitations specified in this report.

INSTALLATION INSTRUCTIONS

General: The window assembly shall be installed in accordance with the manufacturer's installation instructions. Detail installation instructions and drawings are available from the manufacturer.

Installation: The wood wall framing members shall be minimum Douglas Fir-Larch dimension lumber. The window shall be mounted to the wood wall framing members using the nailing flange with minimum No. 8 x 1 $\frac{5}{8}$ " screws. The fasteners shall be located approximately 8 inches from each corner and approximately 16 inches on center. The fasteners shall be long enough to penetrate a minimum of 1 $\frac{1}{2}$ inches into the wall framing members.

Note: The manufacturer's installation instructions shall be available on the job site during installation. All fasteners shall be corrosion resistant as specified in the International Residential Code (IRC), the International Building Code (IBC), and the Texas Revisions.